

APPENDIX B: VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Please amend claims 1, 9, 11, 19, 33, 41, 43 and 51 as follows:

1. (AMENDED) A method of making a diode laser assembly, comprising:

providing a substrate;

forming an epitaxial structure on the substrate, the epitaxial structure having optically active and optically inactive areas;

forming a [waveguide layer]laser in the epitaxial structure, the laser producing a tunable laser output; and

forming [a laser and]an amplifier in the epitaxial structure [containing the waveguide layer], at least a portion of the laser and amplifier sharing a common waveguide, the tunable laser output being coupled to the amplifier along the common waveguide, and the amplifier generating an optical signal in response to the coupled tunable laser output, wherein at least a portion of the waveguide is curved and the waveguide intersects an output facer at an oblique angle.

9. (AMENDED) The method of claim 1, further comprising:

bombarding at least a portion of the epitaxial structure with ions; and

tailoring a bandgap [the]of at least a portion of the epitaxial structure to create a gain medium of the laser.

11. (AMENDED) The method of claim [4]2, wherein the ions have an energy no greater than about 200 eV.

19. (AMENDED) The method of claim [1]23, wherein the waveguide includes an active section.

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33. (AMENDED) A method of making a diode assembly, comprising:

providing a substrate;

forming a first semiconductor layer and a second semiconductor layer in an epitaxial structure having optically active and optically in-active areas, the first and second semiconductor layers having different dopings; and

forming a first waveguide layer between the first and second semiconductor layers, the first waveguide layer including [an amplifier] a waveguide, a first reflector,] and a second reflector [and a gain medium, the first and second reflectors defining a laser cavity];

forming an optically active medium disposed between the first and second reflectors, the first and second reflectors defining a laser cavity and producing a tunable laser output; and

forming an amplifier in the epitaxial structure, wherein the laser cavity and the amplifier are optically aligned, the tunable laser output being coupled into the amplifier along the waveguide, and the amplifier generating an optical signal in response to the coupled tunable laser output, wherein at least a portion of the waveguide is curved and the waveguide intersects an output facet at an oblique angle.

41. (AMENDED) The method of claim 33, further comprising:

bombarding at least a portion of the epitaxial structure with ions; and

tailoring a bandgap [the] of at least a portion of the epitaxial structure to create a gain medium of the laser.

43. (AMENDED) The method of claim [36] 41, wherein the ions have an energy no greater than about 200 eV.

51. (AMENDED) The method of claim [45] 55, wherein the waveguide includes an active section.

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